 file

[redacted] 25X1

466

Central Intelligence Agency

Washington, D.C. 20505

01 JUL 1985

MEMORANDUM FOR: George Bradley
Acting Assistant Secretary for International Affairs and Energy Emergencies
Department of Energy

FROM: [redacted] 25X1
Director of Global Issues

SUBJECT: Oil Stocks and Government Policies of Industrialized Countries [redacted] 25X1

I would like to bring to your attention the attached update on oil stocks and government policies prepared by members of my staff. I hope you find it useful in preparing for next week's International Energy Agency ministerial meeting. If you or members of your staff have any questions concerning the report or if we can be of any further assistance, please call [redacted] 25X1

[redacted] 25X1

[redacted] 25X1

Attachment:
<u>Oil Stocks and Government Policies of Industrialized Countries</u>
GI M 85-10175, July 1985, [redacted] 25X1

[redacted] 25X1

[redacted] 25X1

[redacted] 25X1

[redacted] 25X1

SUBJECT: Oil Stocks and Government Policies of Industrialized Countries

OGI/SRD/EMB [redacted] (1 July 1985) 25X1

Distribution:
1 - George Bradley, DOE
1 - John Broadman, DOE
1 - Charles Boykin, DOE
1 - E. Allan Wendt, State
1 - Dan Serwer, State
1 - SA/DDCI
1 - ExDir
1 - DDI
1 - DDI/PES
1 - NIO/Econ
1 - DD/OGI, D/OGI
1 - CPAS/ISS
1 - OGI/PG/CH
8 - OGI/EXS/PG
1 - Ch/SRD
[redacted] 25X1
1 - SRD/EMB

[redacted] 25X1

[redacted] 25X1

Central Intelligence Agency

Washington, D.C. 20505

DIRECTORATE OF INTELLIGENCE

1 July 1985

Oil Stocks and Government Policies of Industrialized Countries

Summary

One year ago International Energy Agency (IEA) members agreed to coordinate stock drawdowns in future oil disruptions and urged countries with low inventories to make their best efforts to improve their stock situation. Weak consumption and ample excess crude oil productive capacity, however, continue to spur companies to reduce stocks. We estimate oil stocks in the Organization for Economic Cooperation and Development (OECD) countries fell about 50 million barrels last year to 3.0 billion barrels as increases in government-owned stocks only partly offset the decline in commercial inventories. Budgetary constraints and soft market conditions have slowed additions to government stockpiles and related compulsory inventories in some countries. A further sharp reduction in commercial inventories combined with uncertainties regarding foreign country strategies to liquidate government-controlled stocks would leave the industrialized world more vulnerable to a major supply disruption. [redacted] 25X1

This memorandum was prepared by [redacted] 25X1
Energy Markets Branch, Office of Global Issues. The information contained herin is updated to 1 July 1985. Comments may be directed to [redacted] Chief, Strategic Resources Division, on [redacted] 25X1

25X1

GI M 85-10175

[redacted] 25X1

[redacted] 25X1

25X1

Oil Stocks and Government Policies of Industrialized Countries

The Role of Oil Stocks

Oil consumers hold stocks for two primary reasons:

- To meet expected operating requirements, including the need to balance seasonal fluctuations in consumption.

- To ensure against unexpected delivery shortfalls or surges in demand.

Primary inventories are stocks held by major companies and refiners. Government-owned stocks are also included in primary stocks, although they are outside normal commercial channels. 25X1

The exact stock level of an individual company is determined by its expected future needs as well as by any miscalculation that occurred in balancing past supply and demand. Factors influencing decisions on the level of stocks to be held include:

- Expectations about future supply availability, particularly stability in certain key oil-producing nations.

- Estimates of future consumption levels including the strength of economic recovery.

- The level of interest rates.

- Expectations about future price movements.

- Government policies that dictate the maintenance of mandatory stock levels.

Expectations of lower oil prices, weak oil consumption, surplus productive capacity, and increased availability of short-haul crudes, have all provided incentives for oil companies to reduce inventory levels. Since 1981 primary oil stocks in the industrialized countries have fallen by about 400 million barrels. 25X1

The Present Stock Situation

We estimate that total primary oil stocks including government-owned stocks in the industrialized countries stood at approximately 3.0 billion barrels--about 95 days of forward consumption at the end of March (Figure 1 and Table 1). Commercial stocks including compulsory stocks approximated 2.4 billion barrels and government-owned stocks, mainly in the United States, Japan and West Germany, totalled about 600 million barrels. Government-owned stocks, which were practically

GI M 85010175

25X1
25X1

Sanitized Copy Approved for Release 2009/11/25 : CIA-RDP85T01058R000304660001-7

25X1

Table 1

1st Quarter Oil Stocks in Industrialized Countries

	Million Barrels					Days of Forward Consumption				
	1981	1982	1983	1984	1985	1981	1982	1983	1984	1985
Total Stocks Including Government Owned	3423	3281	3139	3098	3047	102	100	99	94	95
US	1401	1392	1372	1444	1459	90	91	93	93	97
Canada	155	144	131	125	116	93	91	98	87	82
Japan	448	478	436	427	450	107	115	111	106	113
Western Europe of which:	1369	1222	1154	1059	980	121	108	105	95	90
France	215	194	159	145	134	120	106	90	88	83
Italy	157	158	155	146	142	95	95	101	99	98
West Germany	311	274	256	246	213	143	126	117	110	98
United Kingdom	160	130	117	108	107	112	88	84	62	63
Australia	41	37	39	37	35	6	6	7	6	6
New Zealand	9	8	7	6	7	11	11	9	9	10
Government-Owned	222	424	446	547	633	7	13	14	7	20
US	121	299	312	392	462	8	20	21	25	31
Japan	46	70	79	94	110	11	17	20	23	28
West Germany	55	55	55	55	55	25	25	25	25	25
Italy	0	0	0	6	6	0	0	0	4	4

25X1

25X1

[redacted] 25X1

nonexistent 10 years ago, now amount to about 20 days of forward consumption. [redacted] 25X1

[redacted] a large portion of commercial stocks--about 55-60 days of consumption--represent minimum operating stocks needed to ensure smooth functioning of the distribution system. Another 10-15 days represent compulsory stocks that companies maintain to meet government requirements. The balance of about 5 days of consumption represents useable commercial stocks that provide added flexibility to meet seasonal as well as unexpected changes in demand. This stock cushion has declined from about 20-25 days in the early 1980s and now provides only a small cushion against oil supply cutoffs. Moreover, because oil is the primary backup fuel for gas, elimination of discretionary stocks would leave West European countries more susceptible to gas supply curtailments. [redacted] 25X1

Renewed expectations of lower oil prices will encourage oil companies to drawdown inventories to minimum levels to avoid losses that would occur with a price drop. A substantial drawdown of useable commercial stocks would sharply reduce demand for OPEC oil and further exacerbate downward price pressures. The liquidation of most useable commercial inventories, however, would leave the companies more vulnerable to a major supply loss. [redacted] 25X1

IEA Stockpile Goals

Following the 1973 oil embargo, the 21-member countries of the International Energy Agency (IEA) agreed to an emergency stockpiling program that would require stocks to reach at least a 90-day level of net imports by 1 January 1980. Emergency stocks are defined as total oil stocks (crude and products) minus a 10-percent allowance for stocks unavailable for use. Originally, the number of days of emergency reserves was to equal physical stocks divided by the previous year's level of net imports. Procurement and storage of the stockpile was left to the discretion of individual countries. [redacted] 25X1

The decline in net imports in member countries after 1980 caused the IEA to become concerned that the reduction in the volume of mandatory stock requirements could result in inadequate emergency reserves once demand increased. As a result, the IEA Governing Board agreed in December 1981 that IEA members should not let stocks fall below the equivalent of 90 days of 1980 net imports, except where lower oil consumption reflected long-term structural changes. In December 1982, the Governing Board again revised the calculation of net imports, this time to include the average net imports of the preceding three years. [redacted] 25X1

According to the IEA, oil stocks for its 21 members stood at 2.8 billion barrels at the end of first-quarter 1985, about 2 percent below year-earlier levels. This equaled 100 days of coverage when measured in terms of average net imports for the

[redacted] 25X1

25X1

previous three years (Table 2). Among member countries only Turkey, Spain, Portugal, Belgium, Luxembourg, and Ireland recorded stock levels below the 90-day commitment. 25X1

IEA Stock Drawdown Agreement

In July 1984 IEA member countries agreed to an early coordinated stock drawdown in the event of a disruption and urged member countries with inadequate inventories to make their best effort to improve their stock situations. Highlights from the agreement on stocks and supply disruptions include the following:

- "A drawdown of stocks held by governments, by stockholding entities, and/or by companies at the urging of governments could be an effective and rapid means for restoring lost oil supply."

- "Stockdraw could be particularly effective in the initial disruption stage, when the danger may be greatest of markets overreacting without regard to underlying supply/demand conditions."

- "Member countries further recognize the value of coordinating their individual stock drawdown efforts and the value of avoiding actions which might limit their effectiveness."

- "All countries must take action to help restore the supply/demand balance. Some countries plan to engage in a coordinated stockdraw, or will undertake complementary actions (demand restraint), and others, both."

- "Member countries whose stocks presently are at lower levels in relation to current net imports than would permit them to make a meaningful contribution to a coordinated stockdraw, should promptly use their best efforts to improve their stock positions."

- "Those countries which are then in a position to contribute meaningfully to such a stockdraw (either by means of physical drawdown or by implementation of mutually reinforcing measures, or both) will consult...

    (A) To determine what volume and duration of stockdraw would be effective...

    (B) To discuss methods for implementing stockdraw;

    (C) To reach a consensus on the action which those countries plan to take...

    (D) To recommend to the Governing Board other actions which could be taken to complement such stockdraw."

25X1

Table 2

Stocks on Land in IEA Countries

Measured in Days of Net Imports
end of March 1985

	Days of 1984 Net Imports[a]	Days 1982/84 Average Net Imports
IEA	163	161
US	306	308
Canada	--	--
Japan	101	102
IEA Europe	108	104
Austria	102	100
Belgium	72	66
Denmark	199	186
Greece	95	94
Ireland	79	74
Italy	94	90
Luxembourg	79	77
Netherlands	206	191
Norway	--	--
Portugal	79	78
Spain[b]	83	76
Sweden	114	93
Switzerland	160	161
Turkey	44	46
United Kingdom	--	--
Australia	632	338
New Zealand	108	108

[a]Calculated according to IEA definitions.
[b]Estimated.

 25X1

The key players in any coordinated strategic stock drawdown plan are the United States, Japan, and West Germany. Tokyo appears interested while Bonn seems less flexible to new approaches to crisis management. 25X1

Major Government-Owned Stockpiles

Although oil inventory goals have been set up by the IEA for member countries, individual governments have instituted a variety of stockpile policies to meet their commitments. There are three basic forms of stockpile programs in the industrialized countries:

- Government-owned stockpiles intended for civilian use.
- Public storage corporations set up with government assistance to finance or administer energy reserves.
- Government requirements that the oil industry maintain emergency reserves. 25X1

Some governments have adopted more than one of these programs (Table 3). The responsibility for procuring and storing oil stocks has been given to commercial firms in most industrialized countries. The firms maintain physical control over stocks and carry the financial burden of storage, although concessions are granted in some countries. Despite the lack of direct government control over stocks in most countries, all member governments can exercise control during an emergency either by law or as a result of "a gentleman's agreement" with the oil companies. In three countries--the United States, Japan, and West Germany--the governments have become major stockholders through the purchase and storage of crude oil (Table 4). 25X1

United States. Until 1975, all oil stocks in the United States except military requirements were controlled by commercial firms with no government involvement. As a result of the Arab oil embargo in 1973-74, the government decided to establish a Strategic Petroleum Reserve (SPR) that would be wholly government-owned and funded. The SPR totaled 462 million barrels at the end of March 1985 and is expected to increase to 489 million barrels by 1 October 1985. The current objective of the program is to accumulate 750 million barrels by 1991. The crude oil is stored underground in salt domes or mines and is in addition to reserves maintained by commercial firms. 25X1

Japan. Tokyo's stockpile program requires the petroleum industry to maintain 90 days product equivalent of the previous years' consumption with the Ministry of Trade and Industry (MITI) responsible for setting annual objectives. In 1977 the government decided to develop its own stockpile with the objective of acquiring 189 million barrels by 1988. Purchases began in 1978, and by March 1985 the government-owned stockpile

 25X1

25X1

Table 3

Major Developed Countries: Stock Ownership

	Government-Owned	Stockholding Entities	Company-owned[1] [2]
United States	X		X
Canada			X
Japan	X		X[3]
Austria		X	X
Belgium			X[3]
Denmark		X	X[3]
France			X[3]
Greece	X		X
Ireland	X		X[3]
Italy	X		X[3]
Luxembourg			X[3]
Netherlands		X	X
Norway			X
Portugal			X[3]
Spain			X[3]
Sweden	X		X
Switzerland			X[3]
Turkey			X
UK			X[3]
West Germany	X	X	X
Australia			X
New Zealand	X		X

[1] Includes stocks held by companies that are partly or fully owned by governments.
[2] Includes stocks held by certain large consummers, such as utilities, in some countries as required by law or otherwise controlled by governments.
[3] Includes stocks held to meet mandatory stock-holding requirements.

25X1

25X1

25X1

Table 4

Major Government-Storage Programs

	Present Size[a] 31 March 85	Planned[a] Size	Target Date	Type of Oil Held	Storage Sites
United States	462	750	1991	Crude	Salt Dome
West Germany	55	73	NA[b]	Crude	Salt Dome
Sweden	45[c]	Unknown	Unknown	Crude and products	Rock caverns and tanks
Japan	110	189	1988	Crude	VLCCS[d] and onshore sites
Italy	6	Unknown	Unknown	Crude and products	Refiner-ies

[a]Million bbl.
[b]Target date flexible. Government buys oil when budgetary circumstances allow.
[c]Size of stockpile is an estimate.
[d]Very large crude carriers; the oil will be moved to on-land storage tanks or special floating storage islands during the 1980s.

25X1

25X1

[redacted] 25X1

25X1

held 110 million barrels. Tokyo has assured the United States that it will meet its stockpile targets. [redacted]

West Germany. Bonn initially required refiners and importers to meet the IEA stockpile objective even though the government had been accumulating a separate strategic stockpile since 1970. In 1978 responsibility for compulsory stocks was shifted to the Compulsory Storage Corporation (EBV), a state corporation. EBV was required to purchase a 65-day supply of oil based on the previous year's consumption and acquire sufficient storage capacity for these supplies. In early 1983, EBV stocks stood at about 117 million barrels. The government also requires refiners to hold an additional 25 days of inventory as working stocks. In addition to these compulsory stocks, the government's strategic stockpile currently contains 55 million barrels with an ultimate goal of 73 million barrels. Budgetary constraints have prevented Bonn from adding to the strategic reserve since 1981. [redacted] 25X1

Stockpile Programs in Other Countries

Companies operating in **France** must maintain stocks equivalent to 90 days of the previous 12 months inland sales; the government has expressed no interest in maintaining a separate strategic reserve. The French government reportedly is considering easing mandatory stock requirements aimed at saving foreign exchange. In general, Paris favors imposing demand restraint measures in the initial stages of a disruption rather than drawing down stocks. [redacted] 25X1

Increasing domestic production has enabled the **United Kingdom** to reduce stock requirements. Oil companies maintain the bulk of oil reserve stockpiles. **Canada** and **Norway**--the two other major oil-producing OECD countries--have announced no stockpile programs. [redacted] 25X1

The **Italian** Government requires oil companies to maintain 90 days of emergency oil stocks. The Italian strategic reserve is held by SOGESCO, a company under the control of ENI, the state oil company. [redacted] 25X1

Belgium relies on oil companies to meet IEA objectives. Private petroleum companies are obligated under a 1965 law to hold stocks equivalent to 90 days of the previous year's consumption. Stock requirements are specified for gasoline, diesel, and residual fuel oil, but companies retain the option of varying the mix of these stocks based on conditions set forth by the government. In a crisis, control of Belgian stocks would pass to NESO (the National Emergency Sharing Organization). The government presently has no plans to build a government-owned stockpile. [redacted] 25X1

In **Sweden**, industry is required to hold stocks equal to 110 days of the previous year's consumption. Government-owned

[redacted] 25X1

[redacted] 25X1

stockpile levels and target goals are a closely guarded secret, but we estimate that current government inventories total about 45 million barrels. [redacted] 25X1

In **Switzerland**, compulsory stocks are equivalent to 180 days of the previous year's consumption and are held by industry. Oil companies in the **Netherlands** are required to hold stocks equivalent to 90 days of the previous year's consumption, and oil traders are required to hold an additional 70 days of stocks. [redacted] the public sector corporation, COVA, also has acquired 30 days of supplies including a mix of crude and products. [redacted] 25X1 25X1

Outlook

Commercial stocks have declined sharply in recent years and could decline further, given the prospects for continued weakness in oil prices and ample surplus productive capacity. Commercial stocks as measured in days of forward consumption are now approaching levels that existed in the mid 1970s and could even go lower. If oil companies persist in the belief that oil prices will fall, an estimated 100-200 million barrels of inventories could be dumped on the market. Should another major supply disruption occur, we believe companies will have little cushion available in the form of useable stocks to offset reduced oil flows. [redacted] 25X1

We believe government-owned oil stocks will grow only slightly over the next several years because of budgetary constraints and weak market conditions. Nevertheless, effective deployment of government-owned stocks could play an important role in offsetting any future oil supply disruption. The IEA coordinated stock drawdown could play a major role in coping with future disruptions. A key problem will be the design and implementation of a program believed to be effective and equitable. In addition to demand restraint measures, countries without government-owned stockpiles could share the burden of a disruption by augmenting suppliles through a relaxation of mandatory commercial stockpile requirements. [redacted] 25X1

[redacted] 25X1